

-1- (JAPIO)

TITLE
PATENT APPLICANT
INVENTORS

PATENT NUMBER
APPLICATION DETAILS
SOURCE

INT'L PATENT CLASS
JAPIO CLASS
ABSTRACT

ALKALINE CELL
(0000000) ARUKARI KANDENCHI GIJUTSU KENKYU KUMIAI
SHINODA, KENICHI; OOTA, HIROHIKO; MAEDA, YOSHIHIRO;
TANAKA, YUZO; TSUTSUI, KIYOHIDE
87.05.15 J62105365, ~~JP 62-105365~~
85.11.01 85JP-246049, 60-246049
87.10.12 SECT. E, SECTION NO. 548; VOL. 11, NO. 312,
PG. 111.
H01M-004/06; H01M-004/42
42.9 (ELECTRONICS--Other)
PURPOSE: To suppress generation of hydrogen gas
caused by formation of a local cell due to a
potential difference between different types of metal
sufficiently even in case of amalgamation lower than
3wt% by arranging a micro particle layer near the
current collecting face of negative electrode.
CONSTITUTION: A negative electrode is formed of a
micro particle layer composed of fine zinc powder and
a rough particle layer composed of coarse zinc powder
where the micro particle layer is arranged near the
current collecting face of the negative electrode.
The micro particle layer composed of fine zinc powder
is arranged near the current collecting face of the
negative electrode, thereby the contacting area of
zinc powder against the current contacting face of
the negative electrode is increased and the total
quantity of mercury to be transferred to the current
collecting face of the negative electrode is
increased so that the current collecting face of the
negative electrode is amalgamated uniformly and
sufficiently even if the amalgamation is lower than
3wt% or 2wt%. While when employing a rough particle
layer for the remaining section, the total surface
area of zinc powder in the negative electrode is
controlled so that it is possible to suppress the
volume of gas to be produced through corrosive
reaction of zinc powder to same level with
conventional cell.

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